

Notice of Allowability

Application No.

09/903,071

Examiner

Haresh Patel

Applicant(s)

GROVE ET AL.

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/19/2006.
2. ☒ The allowed claim(s) is/are 1,9 and 21-38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 9/7/06.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Miss Wendi R. Schepler on September 7, 2006.

Amendment to the Claims

3. Please amend the claims 1, 9 and 34 as attached.

Allowable Subject Matter

4. Claims 1, 9 and 21-28 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

September 7, 2006

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100



Claim 1: (currently amended) In a communication network comprising:

a plurality of local name servers, each of the local name servers being capable of

answering name-to-address resolution queries by using temporarily stored

information or by further querying other name servers,

at least one application server having at least one application server address and being

capable of receiving requests for at least one service and performing the at least

one service, wherein the at least one service has a service name,

a plurality of clients, each of the clients being associated with at least one of the local

name servers, and being capable of querying the at least one associated local

name server for an address of the at least one application server, to receive from

the at least one associated local name server an answer specifying an address of

the at least one application server, and to send a request for the at least one service

to the at least one application server having the address specified in the answer,

and at least one authoritative name server, the at least one authoritative name server being

capable of providing answers to name-to-address resolution queries from the local

name servers, the content of every answer having a validity period,

a method for discovering associations between the clients and the local name servers,

comprising the steps of:

producing a query record concerning a query from one of the local name servers received

by the at least one authoritative name server and an answer to the query, the query

record including:

a first application server identifier of the at least one application server that is the

answer to the query,

a response timestamp expressing when the answer was issued,
a validity period defined for the first application server identifier, and
a local name server address of the local name server from which the query was
received;

producing a request record concerning a service request issued by one of the clients for a
service and received by the at least one application server, the request record
including:

a second application server identifier of the application server that received the
service request,

a request timestamp expressing when the service request was received, and

a client address of the client that issued the service request; and

comparing query records and request records to find matching pairs of query records and
request records, and associating the local name server address in the matching
query record to the client address in the matching request record, a matching pair
being defined as a first-identified pair of one of the query records and one of the
request records for which the first application server identifier matches the second
application server identifier and the response timestamp matches the request
timestamp.

Claim 9: (currently amended) A system for discovering associations between clients and local
name servers, comprising

at least one name server monitor, the at least one name server monitor being associated
with an authoritative name server and configured to modify an answer to a

domain name resolution query from at least one local name server, the modified answer including a monitoring address for an application server, and further configured to create query records,
wherein each of the query records includes a local name server identifier, an application server identifier, and a response timestamp;
at least one application server monitor, the at least one application server monitor being associated with an application server and configured to receive a request from a client and pass the request to the associated application server, and further configured to create request records,
wherein each of the request records includes a client identifier, an application server identifier of the associated application server, and a request timestamp; and
at least one discovery and monitoring manager configured to compare the query records and the request records to discover the associations between the clients and the local name servers.

Claim 34: (currently amended) A method for associating clients and local name servers, comprising:

receiving a domain name resolution query from a local name server for an address of an application server;
responding to the domain name resolution query with an answer that includes a monitoring address for the application server;

creating a query record that includes an application server identifier that uniquely identifies the application server, the monitoring address for the application server, a local name server identifier for the local name server and a response timestamp; receiving a request for content from a client, the request being addressed to the monitoring address for the application server; creating a request record that includes the application server identifier, the monitoring address for the application server, a client identifier that uniquely identifies the client, and a request timestamp; and associating the client with the local name server ~~if~~ when the query record and the request record match, wherein the query record and the request record match ~~if~~ when the application server identifier in the query record matches the application server identifier in the request record, the monitoring address in the query record matches the monitoring address in the request record, and the response timestamp matches the request timestamp.